



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,990	10/21/2003	Martin Lehmann	635.32872VV5	4191

20457 7590 05/12/2004

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

GARBER, CHARLES D

ART UNIT PAPER NUMBER

2856

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,990

Applicant(s)

LEHMANN, MARTIN

Examiner

Charles D. Garber

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/21/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The amendment filed 10/21/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "a zero offset adjusting input of the arrangement" "being operatively connected to" the output of the further storage unit in claim 22. Claim 22 also includes a "further storage unit" which is not described in combination with another "storage unit"

Furthermore, claim 31 includes the limitation "control unit enabling said storage unit and said further storage unit substantially simultaneously" which was not originally described in the disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 22 includes a "a zero offset adjusting input of the arrangement" "being operatively connected to" the output of the further storage unit. A zero offset adjusting input was not described in the original presentation of the disclosure. For purposes of further examination the last clause of the claim reciting "the output of said further storage unit being operatively connected to a zero offset adjusting input of the arrangement" will not be considered with respect to the prior art.

Claim 22 also includes a "further storage unit" which is not described in the original presentation of the disclosure in combination with another "storage unit"

Claims 23-31 depending therefrom are indefinite for the same reason.

Claim 31 also includes the limitation "control unit enabling said storage unit and said further storage unit substantially simultaneously" which was not originally described in the disclosure. For purposes of further examination the limitation will not be considered with respect to the prior art.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 2856

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 22, 23, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuse (US Patent 4,670,847) in view of Delatorre et al. (US Patent 3,800,586).

Regarding claim 22, Furuse discloses a test arrangement for articles (abstract) including pressure source 11 and at least one pressure sensor 63 (see figure 7) generating an electrical output signal at its output as shown block format. The output of the pressure sensor is operatively connected to the input of a storage unit (data storage 42c as shown in figure 3 which are "means for storing a predetermined number of measured data of the differential pressure associated with the articles which have been under inspection judged non-defective") having an output (to junction 47). The output of the data storage (and the output of the sensor) is operatively connected to input of a comparing unit (comparator 49).

Furuse does not expressly recite the output of the comparator is operatively connected to a further storage unit.

Delatorre teaches memory 56 receiving output from comparator 22 (figure 2 and column 4 lines 24-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to connect a storage to the output of a comparator in order to establish an artificial zero reference against which pressure deviation in the test item may be measured.

As for claim 23, Furuse shows input of the sensor pressure source being removably applicable to an opening of an article as shown in figure 7.

As for claim 28, Furuse shows A-D 41 output to data storage 42C, the analog input of said converter being operatively connected to the output of the sensor 22.

As for claim 31, microcomputer 55 is generally considered to be equivalent to a control unit as in the instant invention.

Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuse (US Patent 4,670,847) as modified by Delatorre et al. (US Patent 3,800,586) and applied to claim 22 above and further in view of Hass et al. (US Patent 3,987,664).

Regarding claims 24-27, the references lack a test chamber sealingly closable for receiving a container to be tested, input applicable to the inside of a container in said chamber, said source being connected to said chamber.

Hass teaches this arrangement shown in figure 1. Pressure input goes to the inside of the drum and the source of pressure is connected to the chamber 19 in the structure as the top of the chamber. Sensor 14 has an input connected to the chamber also shown in the figure. The source is applicable to an opening of a drum or container in the chamber as shown in two different forms detailed in figures 2 and 3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to test a container within a test chamber. Use of the chamber may help tester account for container expansion (that is, as the container expands (or contracts) there will be a corresponding inverse change in pressure outside the

Art Unit: 2856

container detectable within the chamber). This way, a change in pressure within the container will not be mistaken for a leak.

It should be noted that in further arrangements involving pressure control and sensing in the chamber environment (outside the container) there are still further known advantages in the prior art. The use of chamber allows the tester to control the pressure environment outside the container so that the need to account for normal changes in atmospheric pressure may be avoided. Furthermore, the chamber may allow the user to build a larger pressure differential between the inside and outside of the container not possible when simply testing the container in ambient conditions. A larger pressure differential may be used to detect smaller leaks more quickly.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuse (US Patent 4,670,847) as modified by Delatorre et al. (US Patent 3,800,586) and applied to claim 22 above and further in view of Massage (US Patent 3,837,215) and Chaud et al. (US Patent 3,733,488)

The references lack the digital output of said analog to digital converter being operatively connected to a digital input of a digital to analog converter, the analog output of said digital to analog converter being operatively connected to said comparing unit.

Massage teaches sensor output to analog input A/D 64, A/D 64 digital output to memory 68 input, memory 68 output to D/A 72 digital input, and D/A 72 digital output to comparator 74.

It would have been obvious to one having ordinary skill in the art to reconvert the signal back to digital in order to incorporate the use of a digital comparator. Chaud

Art Unit: 2856

explains that the use of a digital comparator "achieves a degree of precision and reliability of operation which are superior to those of an analog comparator."

***Allowable Subject Matter***

Claim 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose or suggest a devices as in claim 22 also including output of a further storage unit operatively connected to an input of an amplifier unit. Such would appear to be a redundant feature added to Furuse.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'CDL' or similar, located in the middle right of the page.

cdg